

IN THE CLAIMS:

Please amend the claims as indicated below.

1. (Currently Amended) A method for communicating in a time-domain wavelength interleaved network having a hub node, comprising:  
transmitting substantially all communications through said hub node without changing a wavelength of said communications at said hub node; and  
synchronizing a transmission and reception of a message such that a message sent in a transmitting time-slot  $k$  by a node  $N_i$  is received by a node  $N_j$  in a receiving time-slot  $k$ .
2. (Original) The method of claim 1, further comprising the step of synchronizing a transmission and reception of a message such that a message sent in a time-slot  $k$  by a node  $N_i$  is received by a node  $N_j$  in said time-slot  $k$ .
3. (Original) The method of claim 1, wherein said synchronizing step is performed by said hub node.
4. (Original) The method of claim 1, wherein said hub node imposes a timing reference.
5. (Original) The method of claim 1, wherein said hub node recovers from a link failure by shifting transmission times of nodes separated from said hub node by said failed link.
6. (Currently Amended) A method for communicating performed by an interior node in a time-domain wavelength interleaved network having a hub node, comprising:  
sending substantially all communications received from said hub node having a wavelength indicating said communication is destined for another node on all branches outward from said hub node without changing a wavelength of said communication at said hub node, wherein a transmission and reception of a message are synchronized such that a message sent in a transmitting

time-slot  $k$  by a node  $N_i$  is received by a node  $N_j$  in a receiving time-slot  $k$ .

7. (Original) The method of claim 6, further comprising the step of synchronizing a transmission and reception of a message such that a message sent in a time-slot  $k$  by a node  $N_i$  is received by a node  $N_j$  in said time-slot  $k$ .

8. (Original) The method of claim 7, wherein said synchronizing step is performed by said hub node.

9. (Currently Amended) A node in a time-domain wavelength interleaved network having a hub node, comprising:

a tunable laser directed toward said hub node; and

a wavelength dropper for dropping signals having a wavelength associated with said node only from a fiber coming from said hub node, wherein substantially all communications in said time-domain wavelength interleaved network are transmitted through said hub node without changing a wavelength of said communications at said hub node and wherein a transmission and reception of a message are synchronized such that a message sent in a transmitting time-slot  $k$  by a node  $N_i$  is received by a node  $N_j$  in a receiving time-slot  $k$ .

10. (Original) The node of claim 9, where a transmission and reception of a message are synchronized such that a message sent in a time-slot  $k$  by a node  $N_i$  is received by a node  $N_j$  in said time-slot  $k$ .

11. (Original) The node of claim 9, wherein said hub node imposes a timing reference.

12. (Original) The node of claim 9, wherein said hub node performs a time-slot scheduling without regard to a delay in said time-domain wavelength interleaved network.

13. (Original) The node of claim 9, wherein said hub node recovers from a link failure by shifting transmission times of nodes separated from said hub node by said failed link.
14. (Currently Amended) A time-domain wavelength interleaved network, comprising:  
a plurality of nodes, including a hub node, wherein substantially all communications in said time-domain wavelength interleaved network pass through said hub node without changing a wavelength of said communications at said hub node and wherein a transmission and reception of a message are synchronized such that a message sent in a transmitting time-slot  $k$  by a node  $N_i$  is received by a node  $N_j$  in a receiving time-slot  $k$ .
15. (Original) The time-domain wavelength interleaved network of claim 14, where a transmission and reception of a message are synchronized such that a message sent in a time-slot  $k$  by a node  $N_i$  is received by a node  $N_j$  in said time-slot  $k$ .
16. (Original) The time-domain wavelength interleaved network of claim 14, wherein said hub node imposes a timing reference.
17. (Original) The time-domain wavelength interleaved network of claim 14, wherein said hub node performs a time-slot scheduling without regard to a delay in said time-domain wavelength interleaved network.
18. (Original) The time-domain wavelength interleaved network of claim 14, wherein said hub node recovers from a link failure by shifting transmission times of nodes separated from said hub node by said failed link.
19. (Original) The time-domain wavelength interleaved network of claim 14, further comprising a plurality of said nodes interconnected in a tree configuration.

20. (Original) The time-domain wavelength interleaved network of claim 14, further comprising a plurality of trees of nodes, each of said trees having a hub node, each of said hub nodes interconnected in a ring configuration.